

Amendments to the Claims

- At the time of the action: Claims 21-41.
- Amended Claims: Claims 21-41.
- After this response: Claims 21-41.

1—20. (Previously Canceled).

21. (Currently Amended) A method of managing a write request from a first ~~source~~ compute node in a storage area network to a first storage node in the storage area network, comprising:

if there is an available direct communication ~~path~~ link between the first ~~source~~ compute node, a first switch, and the first storage node, then executing the write request from the first ~~source~~ compute node to the first storage node using the available direct communication link path;

if there is not an available direct communication ~~path~~ link between the first ~~source~~ compute node and the first storage node, then:

transmitting the write request from the first ~~source~~ compute node to a second ~~source~~ compute node if there is an available direct communication path from the first ~~source~~ compute node to the second ~~source~~ compute node and an available direct communication ~~path~~ link from the second ~~source~~ compute node through the first switch or a second switch to the first storage node.

22. (Currently Amended) The method of claim 21, wherein if executing the write request from the first ~~source~~ compute node to the first storage node generates a timeout failure, then:

transmitting the write request from the first ~~source~~ compute node to a second ~~source~~ compute node if there is an available communication path from the first ~~source~~ compute node to the second ~~source~~ compute node and an available communication path from the second ~~source~~ compute node to the first storage node.

23. (Currently Amended) The method of claim 22, wherein transmitting the write request from the first ~~source~~ compute node to the second ~~source~~ compute node comprises encapsulating the write request.

24. (Currently Amended) The method of claim 21, further comprising executing the write request from the second ~~source~~ compute node to the first storage node.

25. (Currently Amended) The method of claim 24, further comprising transmitting an error message from the second ~~source~~ compute node to the first ~~source~~ compute node if the write request fails.

26. (Currently Amended) A method of managing a write request from a first ~~source~~ compute node in a storage area network to a mirrored storage data set having a first storage node and a second storage node in the storage area network, comprising:

if there are available communication paths between the first ~~source~~ compute node and both the first storage node and the second storage node in the mirrored data set, then executing the write request from the first ~~source~~ compute node to both the first storage node and the second storage node using the available communication paths;

if there are no available communication paths between the first ~~source~~ compute node and the first storage node and the second storage node, then invoking an error routine;

if there is an available communication path between the first ~~source~~ compute node and only one of the first storage node and the second storage node in the mirrored data set, then:

executing the write request from the first ~~source~~ compute node to the first storage node or the second storage node via the available communication path;

transmitting the write request from the first ~~source~~ compute node to a second ~~source~~ compute node if there is an available direct communication path from the first ~~source~~ compute node to the second ~~source~~ compute node and an available communication path from the second ~~source~~ node through a first switch or a second switch to the first storage node or the second storage node.

27. **(Currently Amended)** The method of claim 26, wherein if executing the write request from the first ~~source~~ compute node to the first storage node generates a timeout failure, then:

transmitting the write request from the first ~~source~~ compute node to a second ~~source~~ compute node if there is an available communication path from the first ~~source~~ compute node to the second ~~source~~ compute node and an available communication path from the second ~~source~~ compute node to the first storage node.

28. **(Currently Amended)** The method of claim 27, further comprising executing the write request from the second ~~source~~ compute node to the first storage node.

29. **(Currently Amended)** The method of claim 26, wherein if executing the write request from the first ~~source~~ compute node to the second storage node generates a timeout failure, then:

transmitting the write request from the first ~~source~~ compute node to a second ~~source~~ compute node if there is an available communication path from the first ~~source~~ compute node to the second ~~source~~ compute node and an available communication path from the second ~~source~~ compute node to the second storage node.

30. **(Currently Amended)** The method of claim 29, further comprising executing the write request from the second ~~source~~ node to the first storage node.

31. (Currently Amended) A method of performing a surrogate write operation in a storage area network, comprising:

receiving, at a second source compute node, a query from a first source compute node, wherein the query identifies a target node in the storage network for the surrogate write operation;

transmitting a reply to the first source compute node, wherein the reply includes a signal component indicating there is an available communication path between the second source compute node and the target node; and

relaying write operations from the first source compute node to the target node.

32. (Currently Amended) The method of claim 31, further comprising determining whether there is an available communication path between the second source compute node and the target node.

33. (Currently Amended) The method of claim 31, wherein relaying write operations from the source compute node to the target node comprises:

receiving an encapsulated write request from the first source compute node;

de-encapsulating the encapsulated write request; and

executing the write request from the second node to the target node.

34. (Currently Amended) The method of claim 31, further comprising transmitting a failure signal from the second source compute node to the first source compute node if the write request from the second source compute node to the target node fails.

35. (Currently Amended) One or more computer-readable media comprising logic instructions for managing a write request from a first ~~source~~ compute node in a storage area network to a first storage node in the storage area network, that, when executed by a processor, cause the processor to perform operations comprising:

executing a write request from the first ~~source~~ compute node to the first storage node using an available communication path between the first ~~source~~ compute node and the first storage node;

if there is not an available communication path between the first ~~source~~ compute node and the first storage node, then:

transmitting the write request from the first ~~source~~ compute node to a second ~~source~~ compute node if there is an available direct communication path from the first ~~source~~ compute node to the second ~~source~~ compute node and an available direct communication path from the second ~~source~~ compute node through a first switch or a second switch to the first storage node.

36. (Currently Amended) The one or more computer-readable media of claim 35, further comprising logic instructions that, when executed by a processor, cause the processor to:

determine if executing the write request from the first ~~source~~ compute node to the first storage node generates a timeout failure, and if so, then to transmit the write request from the first ~~source~~ compute node to a second ~~source~~ compute node if there is an available communication path from the first ~~source~~ compute node to the second ~~source~~ compute node and an available communication path from the second ~~source~~ compute node to the first storage node.

37. (Currently Amended) The one or more computer-readable media of claim 36, further comprising logic instructions that, when executed by a processor, cause the processor to encapsulate the write request before transmitting the write request from the first ~~source~~ compute node to the second ~~source~~ compute node.

38. (Currently Amended) One or more computer-readable media comprising logic instructions for performing a surrogate write operation in a storage area network that, when executed by a processor, cause the processor to perform operations comprising:

receiving, at a second ~~source~~ compute node, a query from a first ~~source~~ compute node, wherein the query identifies a target node in the storage area network for the surrogate write operation;

transmitting a reply to the first ~~source~~ compute node, wherein the reply includes a signal component indicating there is an available communication path between the second ~~source~~ compute node and the target node; and

relaying write operations from the first ~~source~~ compute node to the target node.

39. (Currently Amended) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the processor to determine whether there is an available communication path between the second ~~source~~ node and the target node.

40. (Currently Amended) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the processor to perform operations comprising:

receiving an encapsulated write request from the first ~~source~~ compute node;

de-encapsulating the encapsulated write request; and

executing the write request from the second node to the target node.

41. (Currently Amended) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the processor to transmit a failure signal from the second ~~source~~ compute node to the first ~~source~~ compute node if the write request from the second ~~source~~ compute node to the target node fails.